Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) An information recording apparatus designed for recording information on an optical medium, wherein irradiation means emitting a light beam form series of recorded marks whose lengths between leading edge and trailing edge correspond to respective binary values, wherein said irradiation means are sequentially pulsed from at least a high laser current write level to a low laser current level close to zero and back to the high laser current write level for each bit of a binary value during the writing period of a recorded mark to produce a plurality of current pulses during said writing period, wherein a length between a leading edge and trailing edge of the plurality of current pulses determines a respective binary value and wherein a different length determines a different respective binary value.

2. (Previously presented) The information recording apparatus

as claimed in Claim 1, wherein said low laser current level is equal to zero.

3. (Previously presented) The information recording apparatus as claimed in Claim 1, wherein said irradiation means are sequentially pulsed to a high laser current erase level from said low laser current level close to zero during erasing of a recorded mark.

4. (Previously presented) The information recording apparatus as claimed in Claim 1, wherein a bias level is reached during time intervals different from writing and/or erasing time intervals, and wherein said bias laser current level is substantially equal to said low laser current level.

5. (Previously presented) An information recording method for recording information on an optical medium by forming with a light beam emitted from irradiation means, series of recorded marks whose lengths between leading edge and trailing edge correspond to respective binary values by irradiation means with a beam of light,

wherein the method comprises an act of sequentially pulsing said irradiation means from a high laser current write level to a low laser current level close to zero and back to the high laser current write level for each bit of a binary value during the writing period of a recorded mark to produce a plurality of current pulses during said writing period.

6. (Previously presented) The information recording method as claimed in Claim 5, wherein said low laser current level is equal to zero.

7. (Previously presented) The information recording method as claimed in claim 5, comprising an act of pulsing said irradiation means to a high laser current erase level from said low laser current level close to zero during the erasing of a recorded mark.

8. (Previously presented) The information recording method as claimed in claim 5, wherein a bias level is reached during time intervals different from writing and/or erasing time intervals, and wherein said bias laser current level is substantially equal to

said low laser current level.

9. (Currently amended) An information recording apparatus designed for recording information on an optical medium, the apparatus comprising a laser configured to emit a light beam to form series of recorded marks whose lengths between leading edge and trailing edge correspond to respective binary values, wherein the laser is sequentially pulsed from at least a high laser current write level to a low laser current level close to zero and back to the high laser current write level for each bit of a binary value during the writing period of a recorded mark to produce a plurality of current pulses during said writing period.

10. (Previously presented) The information recording apparatus as claimed in Claim 9, comprising a multiplier configured to receive a first signal representing bit values for each of the bits of the binary value and a second signal that is a pulse pattern and of a higher frequency than the first signal, wherein an output of the multiplier is provided to the laser for controlling emission of the light beam.

11. (Currently amended) The information recording apparatus as claimed in Claim 10, wherein the ~~first and second signals are~~ second signal is phase locked to a clock utilized for generating the first signal such that a start of a write for each bit corresponds to a rising edge of the output of the multiplier.

12. (Currently amended) The information recording apparatus as claimed in Claim 9, wherein the laser is configured to emit a light beam of a higher power level than a conventional laser such that an average delta current of the laser is the same as if the laser ~~where~~ were not sequentially pulsed.

13. (Previously presented) The information recording apparatus as claimed in Claim 9, wherein the laser has a duty cycle of 25% during writing of each bit of the binary value.

14. (Previously presented) The information recording apparatus as claimed in Claim 9, wherein the laser has a duty cycle of 50% during writing of each bit of the binary value.

15. (Currently amended) The information recording apparatus as claimed in Claim 9, wherein the laser has a ~~duty cycle~~write frequency during writing of each bit of the binary value that is different than ~~a duty cycle~~an erasing frequency of the laser during erasing.

16. (New) The information recording apparatus as claimed in Claim 1, wherein the irradiation means has a write frequency during writing of each bit of the binary value that is different than an erasing frequency of the irradiation means during erasing.

17. (New) The information recording method as claimed in Claim 5, wherein the irradiation means has a write frequency during writing of each bit of the binary value that is different than an erasing frequency of the irradiation means during erasing.